Gulf of Mexico Harmful Algal Bloom Bulletin

1 March 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: February 24, 2005

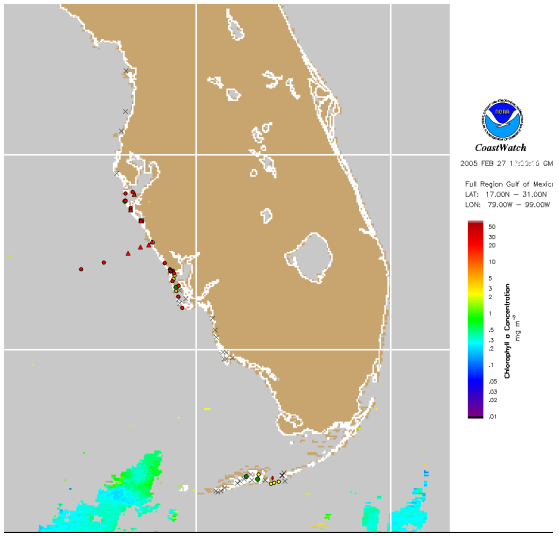
Conditions: A harmful algal bloom has been identified off southern Pinellas, Manatee, Sarasota, Charlotte, and northern Lee counties. Patchy very low to low impacts in southern Pinellas and Manatee counties, and moderate to high impacts are possible in Sarasota, Charlotte and northern Lee counties through Tuesday. Wednesday and Thursday no impacts are expected in southern Pinellas and Manatee counties; low impacts are possible in Sarasota, Charlotte and northern Lee counties.

A harmful algal bloom has also been identified off of Key West. Reports of discolored water are possible.

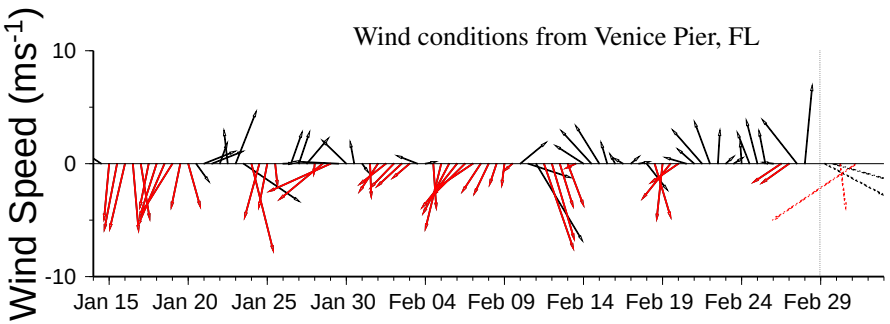
Analysis: Cloudy imagery has limited analysis of the previously identified bloom in southwest Florida. Samples collected Feb. 23-25 identified very low to low concentrations of K. brevis at the mouth of Tampa Bay; low concentrations just south of Tampa Bay; medium concentrations at Venice Pier and onshore at Boca Grande; and high concentrations at New Pass and Placida Harbor. Reports of fish kills near Gasparilla Island, Boca Grande and Venice were made last week. Consistent southerlies have likely limited southern progression of the bloom; but may have promoted northerly intensification and expansion. Strong westerlies and northwesterlies will promote onshore impacts and southerly movement through Tuesday night. Conditions may intensify the bloom Wednesday and Thursday; but will likely mitigate impacts at the beach.

Cloudy imagery has also limited analysis of the previously identified bloom offshore of Key West and the lower Keys. No bloom extents are available at the present time. As of February 22 no Karenia was identified north of the lower keys. Very low and present concentrations of Karenia were found in the Northwest Channel and north of the Marquesas Keys. Winds likely halted further southern transport of the bloom; slight eastward movement may have occurred. Some southern and western transport possible through Thursday.

-Fisher & Stolz



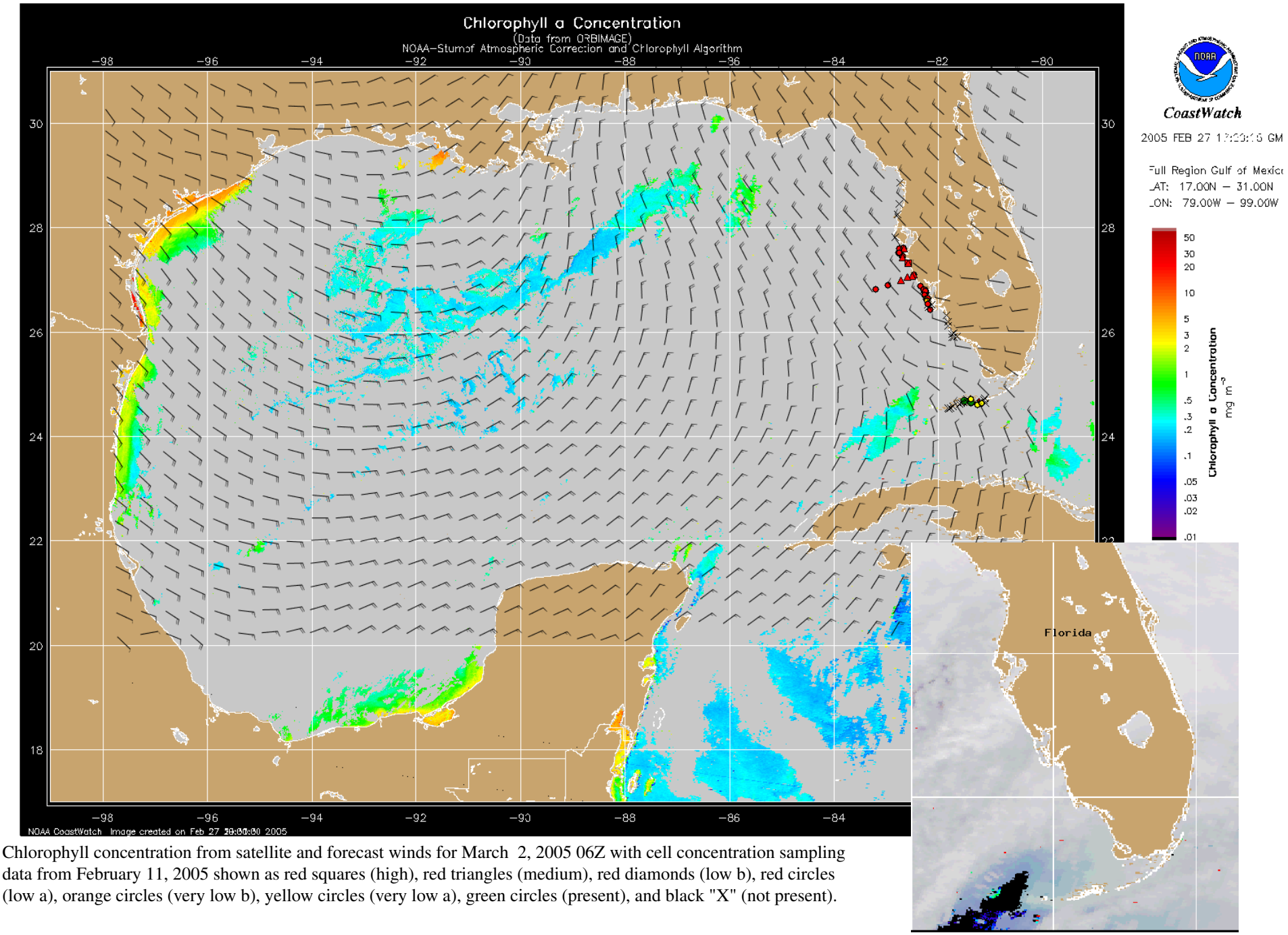
Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 11, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Strong westerlies today (20 kts,10 m/s) will become northwesterlies Tuesday and begin shifting around out of the north Tuesday night into Wednesday. Milder (10-15 kts, 5-8 m/s) easterlies expected Wednesday night into Thursday.

Keys: Todays northwesterlies will continue into tomorrow at 15 kts (8 m/s). North winds Tuesday night will shift to northeasterlies Wednesday and Thursday, remaining around 10-15 kts (8 m/s).



Chlorophyll concentration from satellite and forecast winds for March 2, 2005 06Z with cell concentration sampling data from February 11, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Sand Key, FL